

FIG.1

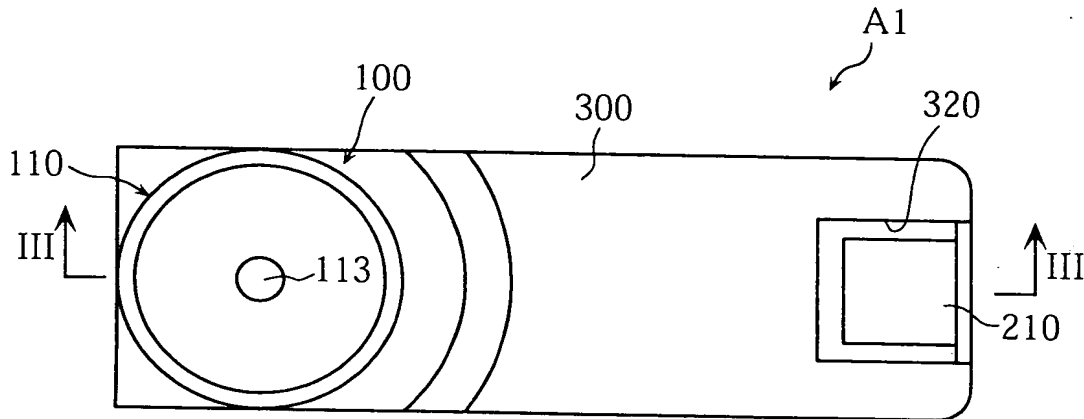


FIG.2

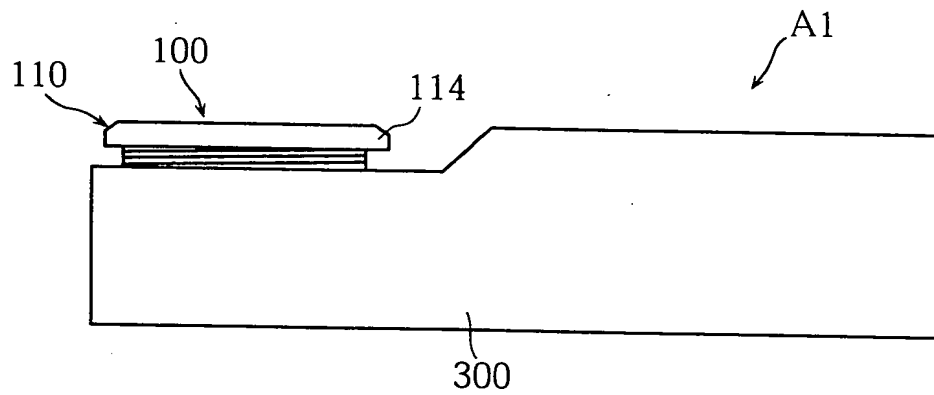
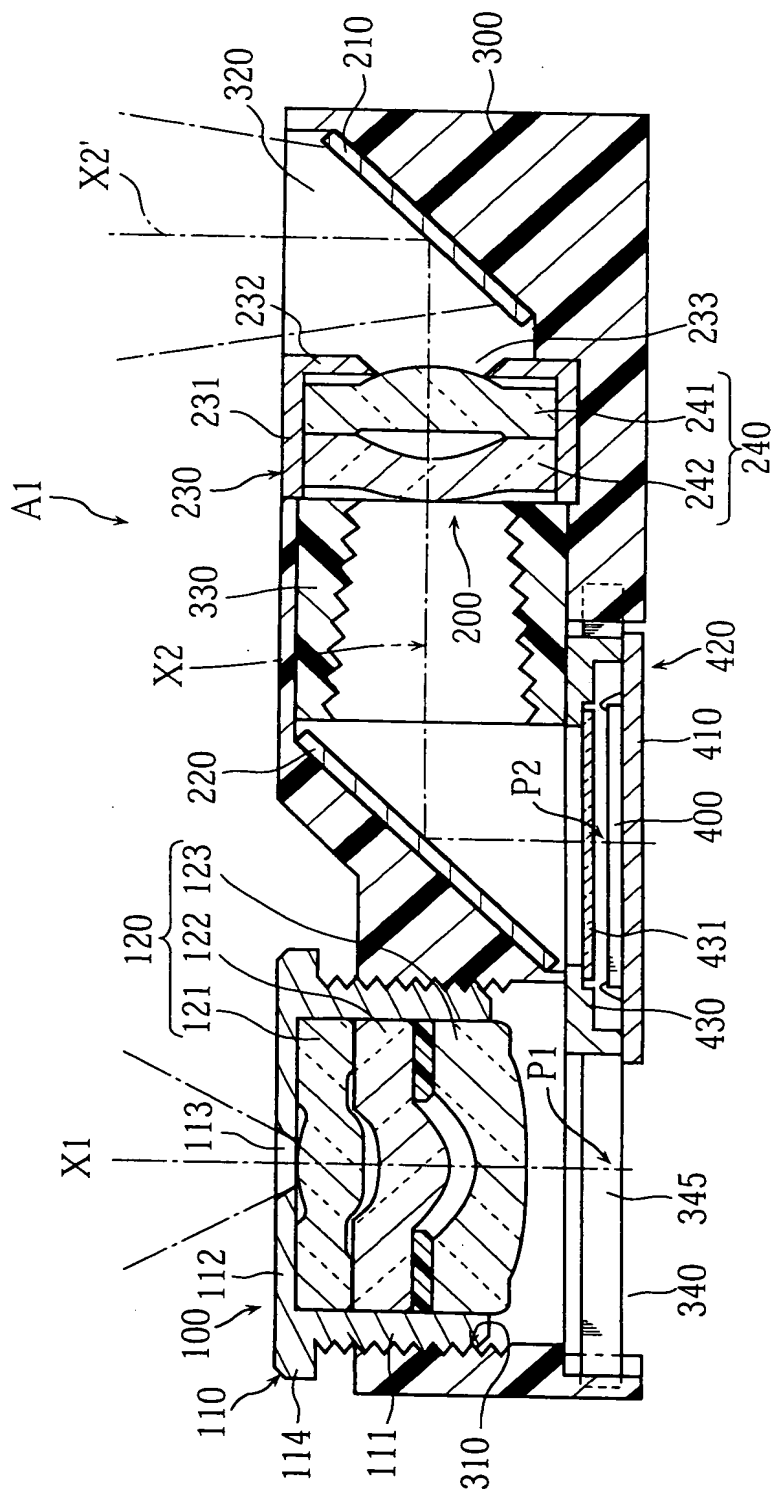




FIG. 4



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FIG. 5

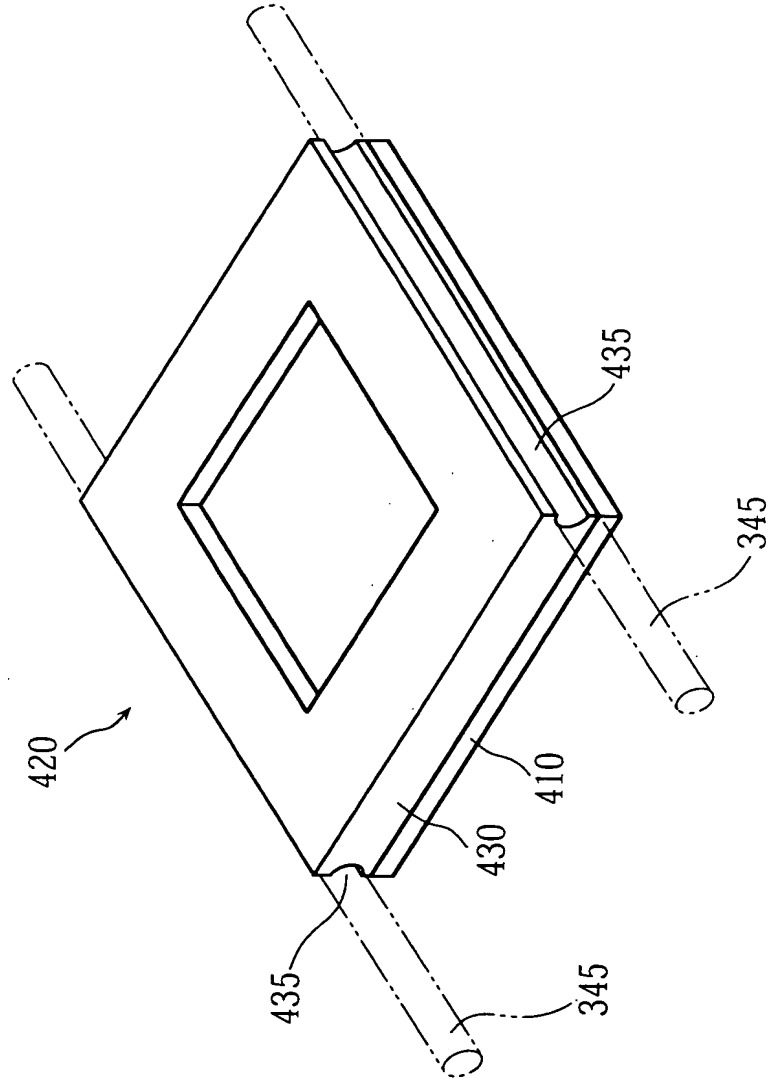


FIG. 6

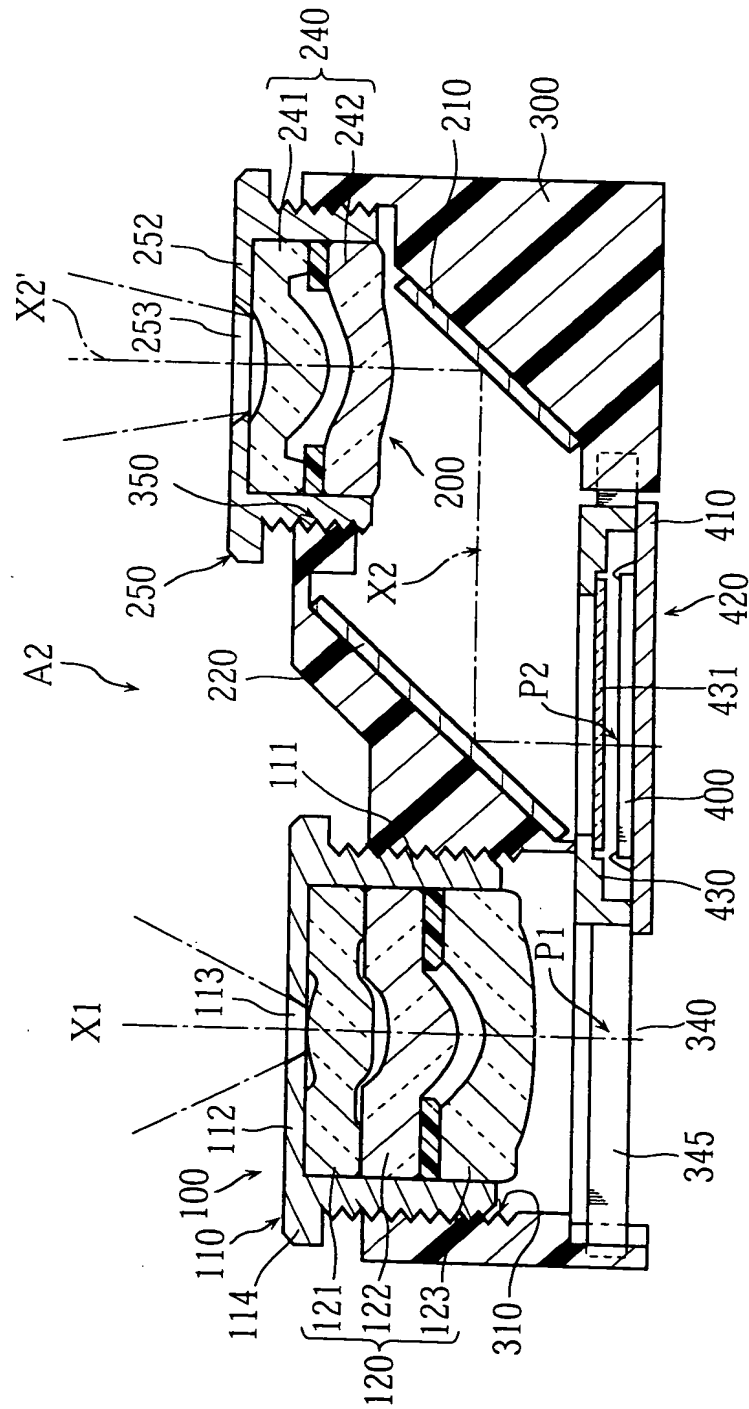


FIG. 7

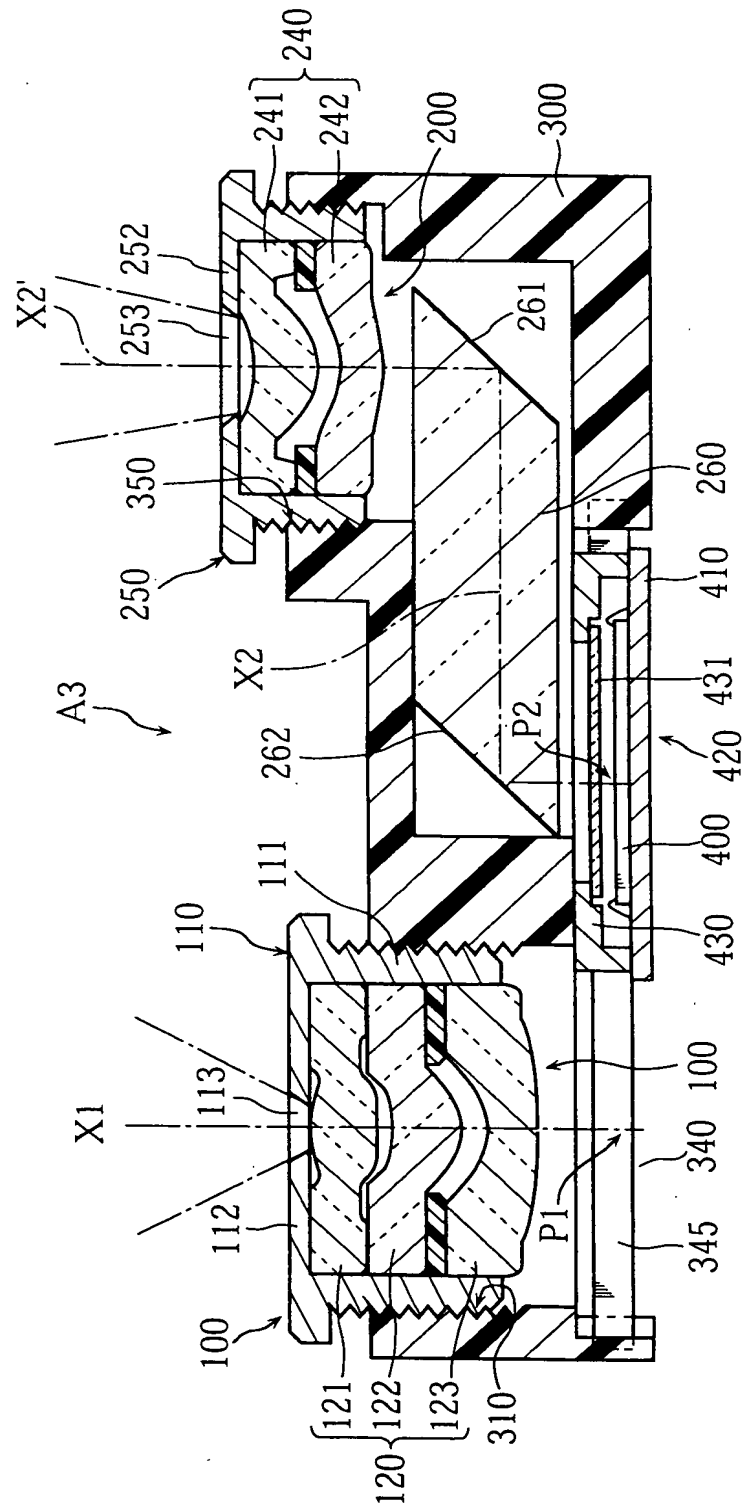




FIG. 9

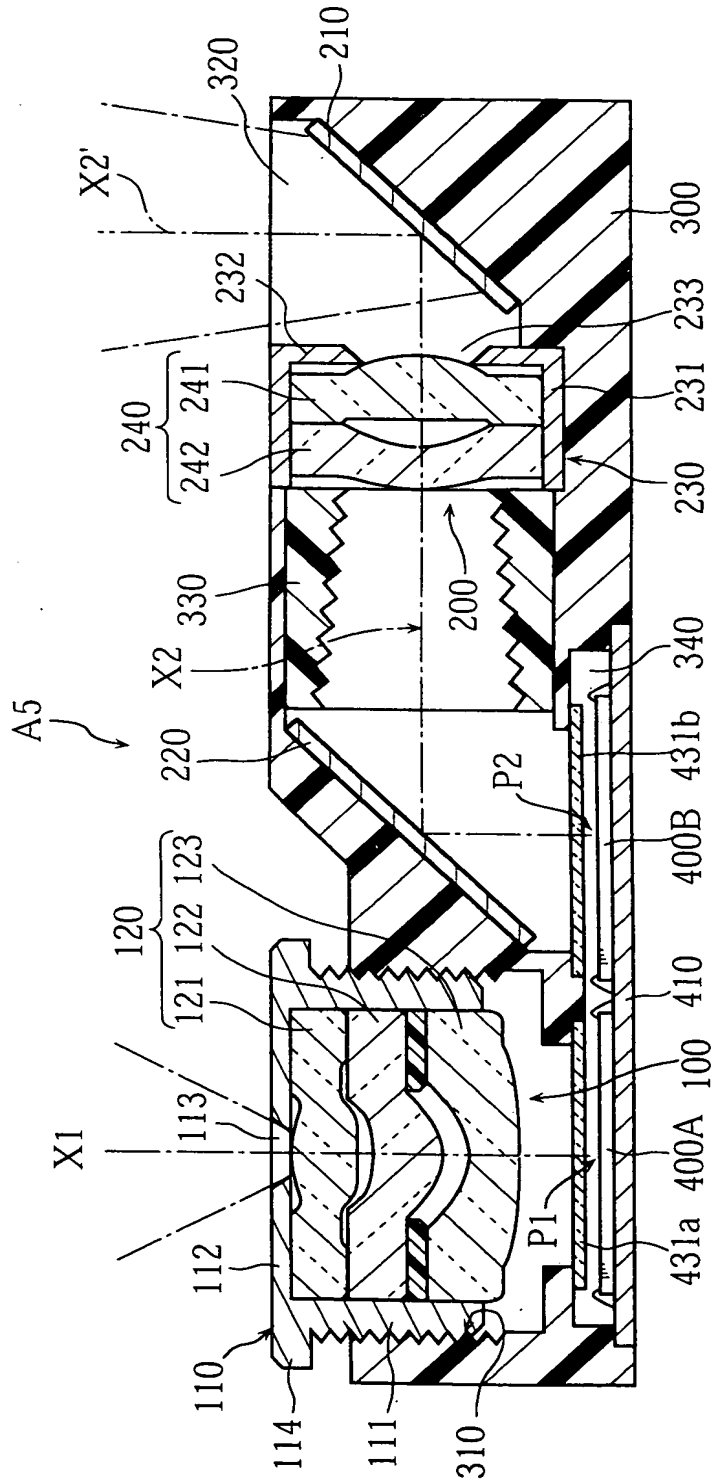




FIG.10

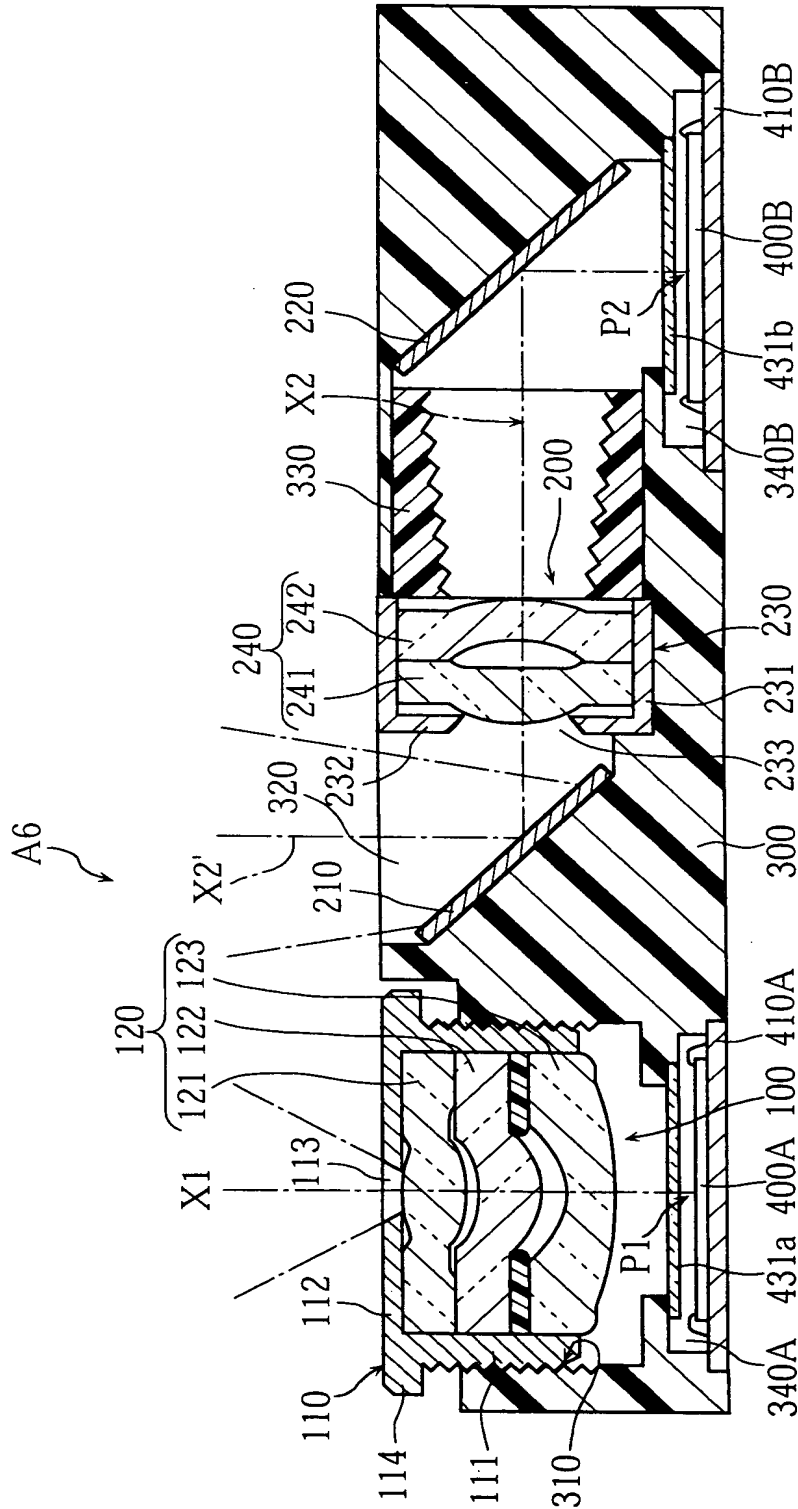


FIG.11

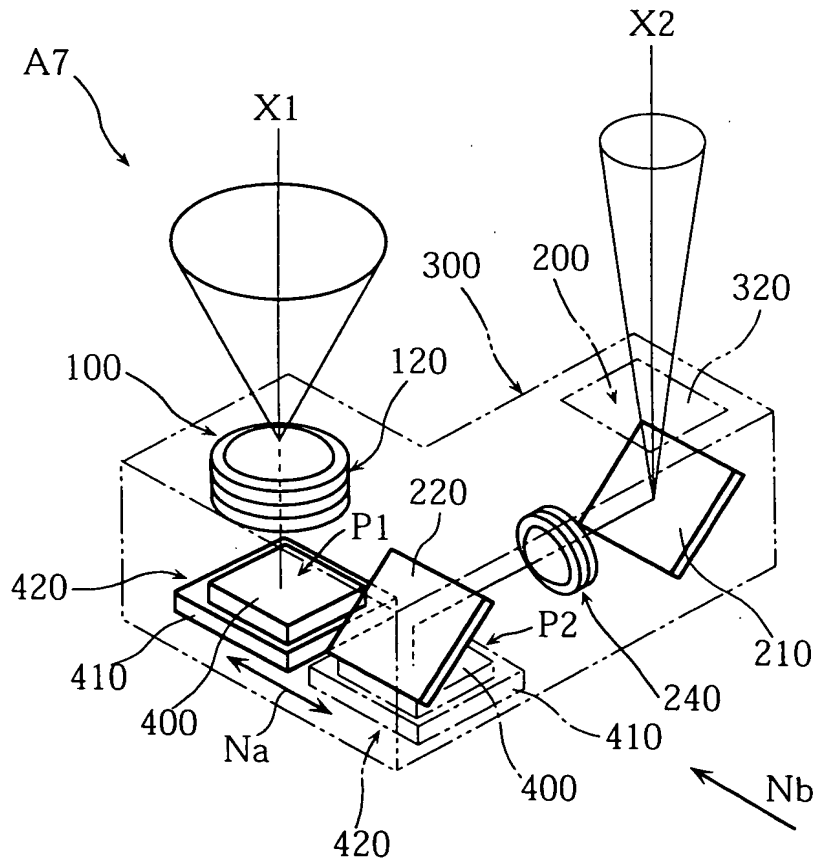


FIG. 12

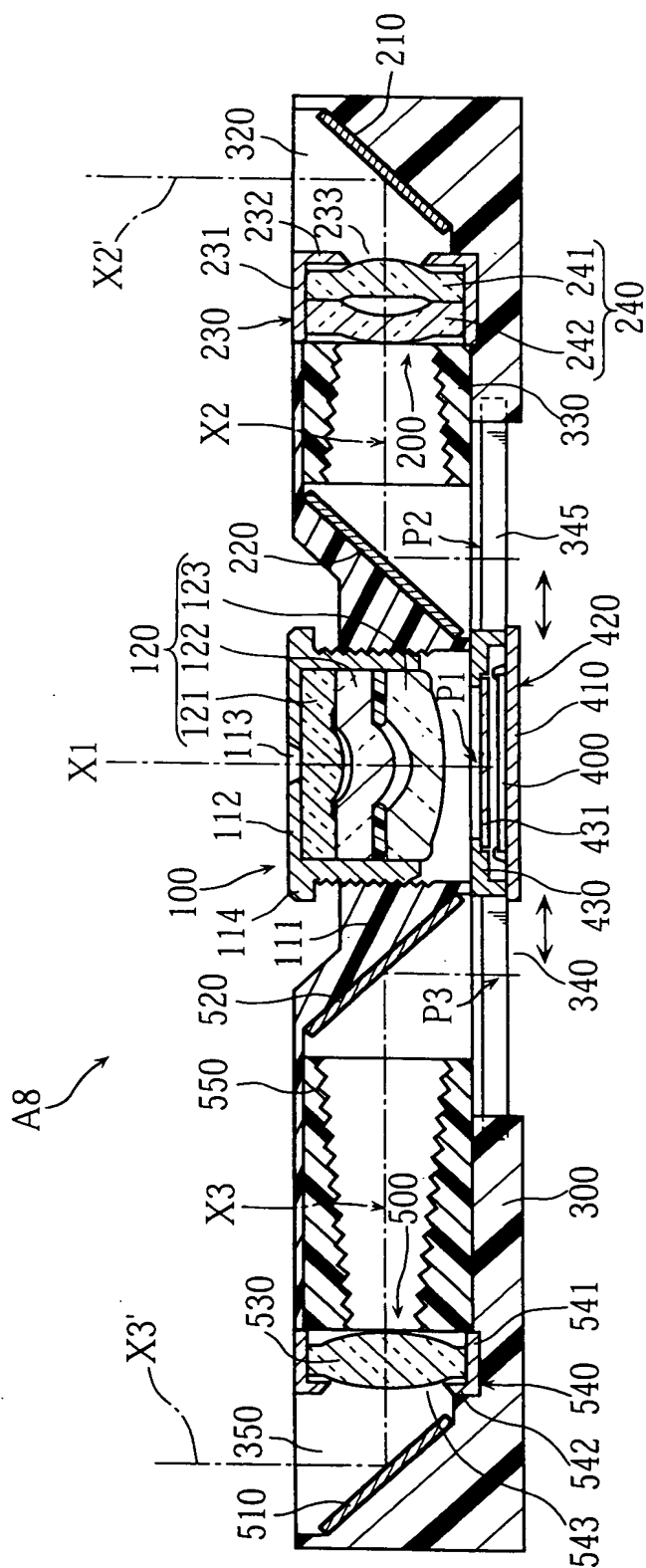


FIG.13

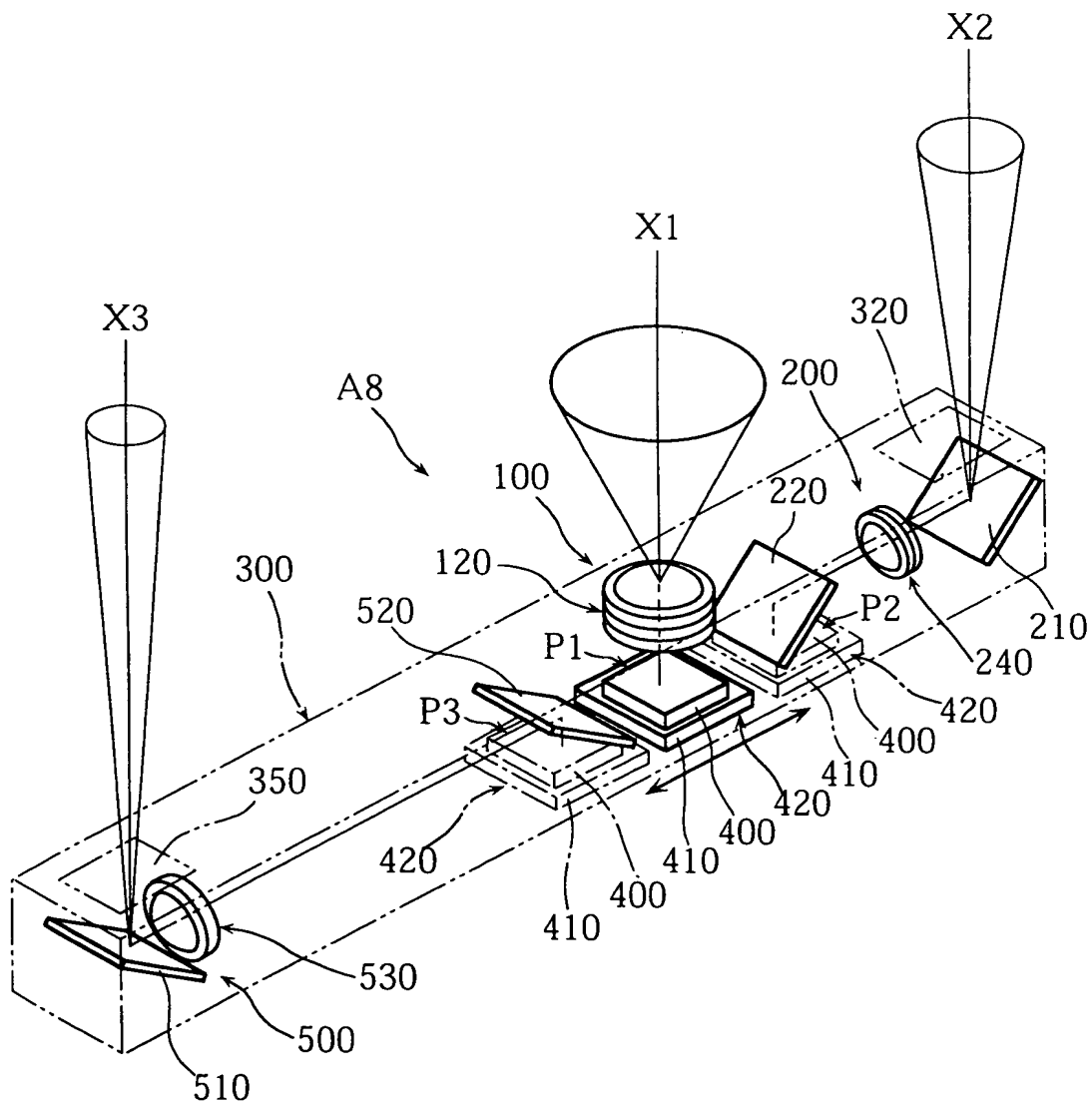


FIG. 14

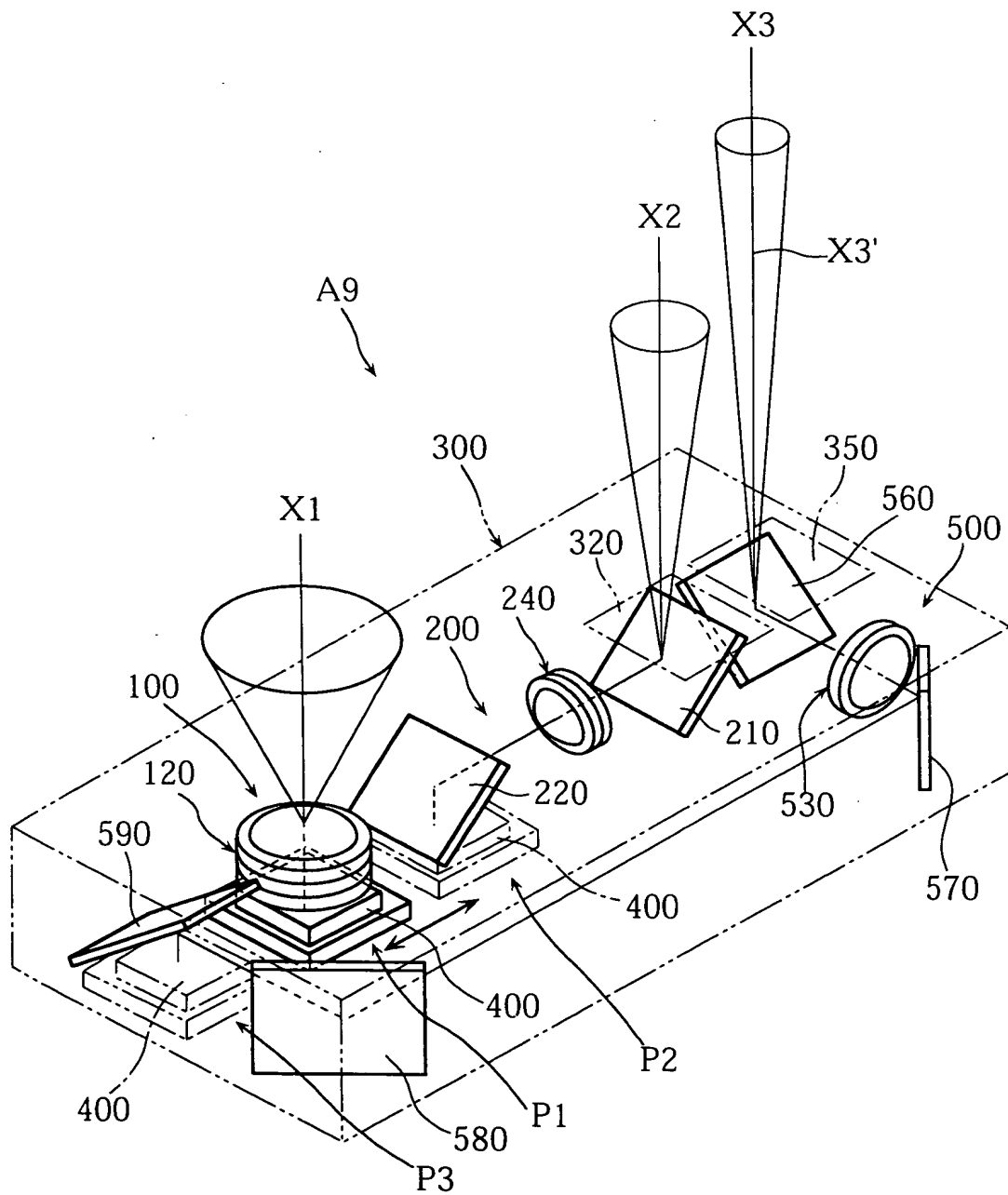


FIG. 15

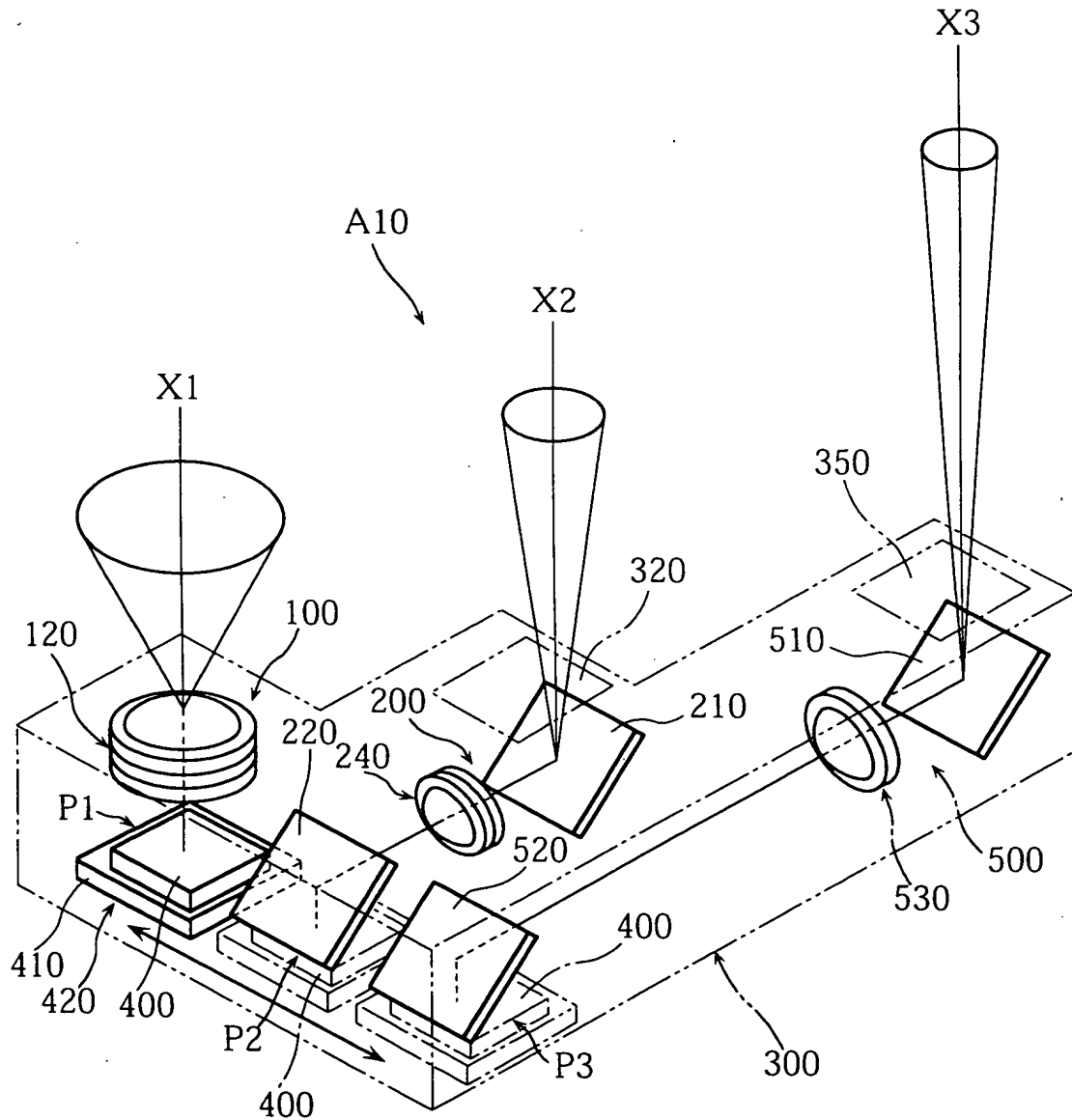


Figure 1 consists of two cross-sectional views, A11 and A12, of a semiconductor device.

**View A11:** This view shows a substrate 100 with a first conductive layer 300A and a second conductive layer 400A. A gate stack 110 is formed over the substrate, comprising a gate dielectric 111 and a gate electrode 112. The gate stack is patterned to form a gate 113. A channel 120 is defined by the gate 113 and the conductive layers 300A and 400A. The channel 120 includes a first portion 121 and a second portion 122. A source/drain region 123 is located adjacent to the channel 120. A contact plug 310 connects the first conductive layer 300A to a pad 340A. A second contact plug 431a connects the second conductive layer 400A to a pad 440A. A passivation layer 114 covers the top surface of the device. A dashed line X1 indicates a cross-section through the center of the device.

**View A12:** This view shows a similar structure to A11, but with different components. It features a substrate 200 with a first conductive layer 220 and a second conductive layer 230. A gate stack 240 is formed over the substrate, comprising a gate dielectric 241 and a gate electrode 242. The gate stack is patterned to form a gate 243. A channel 250 is defined by the gate 243 and the conductive layers 220 and 230. The channel 250 includes a first portion 251 and a second portion 252. A source/drain region 253 is located adjacent to the channel 250. A contact plug 260 connects the first conductive layer 220 to a pad 280. A second contact plug 290 connects the second conductive layer 230 to a pad 300. A passivation layer 270 covers the top surface of the device. A dashed line X2' indicates a cross-section through the center of the device.